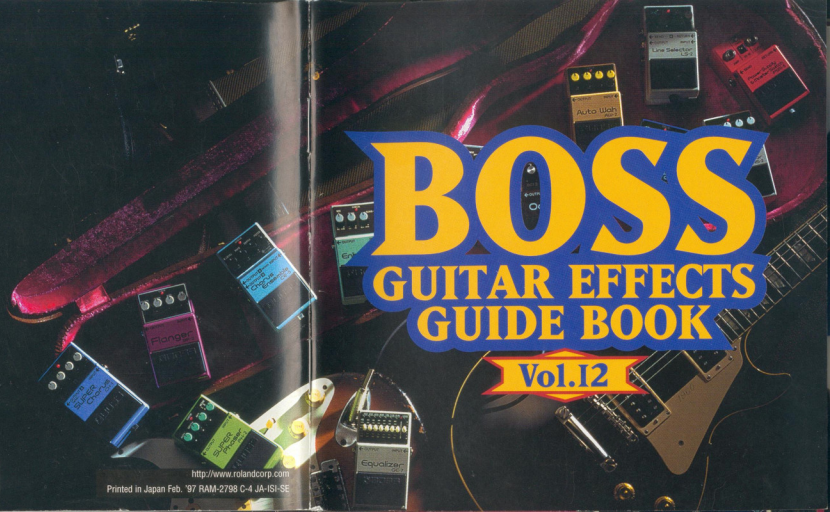




BOSS

GUITAR EFFECTS GUIDE BOOK

Vol.12

a sound innovator
BOSS

<http://www.rolandcorp.com>

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From the basics to the cutting edge

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THE MANY ROLES OF GUITAR EFFECTS

BOSS offers an extensive selection of guitar effects that can be used by guitarists to get any kind of sound you can imagine. Here is a quick reference guide to the type and function of each unit.

ADD DISTORTION

Overdrive SD-1, SD-2, OD-2R, BD-2, PW-2, OS-2, ODB-3

Simulates the sound of an overdriven tube amp and responds to playing touch.

Distortion OS-2, DS-1, DS-2, HM-3, MT-2, XT-2

Produces harder, metallic distortion with many upper harmonics.

Fuzz FZ-2, FZ-3

Radically emphasizes harmonics to produce distinctive distortion.

ADD ACOUSTIC DIMENSIONS

Delay DD-5, DD-3

Samples the original sound and plays it back delayed to simulate acoustic, natural "echo."

Reverb RV-3

Adds the natural acoustic ambience present in rooms and halls.

MODULATE AND DOUBLE SOUNDS

Chorus CE-5, CH-1, CEB-3

Combines a slight delay signal with the original signal and modulates it to create a thick, shimmering sound.

Flanger BF-2

Electronically creates a slight delay and combines it with the original signal for a swirling "doubled" effect.

Phaser PH-2

Combines an out-of-phase signal with the original signal to produce a sound similar to the "spinning" sound of a rotary speaker.

Tremolo TR-2

Varies the volume of the original sound cyclically to create a pulsating effect speaker.

CHANGE TONALITY OF SOUNDS

Equalizer GE-7 GEB-7

Boosts or cuts a particular frequency band for flexible tone control.

Wah FW-3 AW-2

Produces a distinctive "wah wah" effect by boosting or cutting a specific frequency range.

Acoustic Simulator AC-2

Makes an electric guitar sound like an acoustic.

Bass Synthesizer SYB-3

Makes a bass guitar sound like a synthesizer.

REGULATE GAIN LEVEL

Compressor CS-3

Reduces the output of sounds over a set threshold relative to the strength of the input signal, making levels consistent and improving sustain.

Limiter LMB-3

Limits the peak levels of sounds to precisely that of the threshold level.

CHANGE A SOUND'S PITCH

Octave OC-2

Creates a signal one or two octaves lower than the original signal.

Pitch Shifter PS-3

Shifts the pitch of the original sound by various intervals.

Harmonist HR-2

An intelligent pitch shifter that automatically adds harmony depending on the key specified.

REDUCE NOISE

Noise Suppressor NS-2

Eliminates noise resulting from connecting multiple effects units or using very high gain.

CHANGE CONNECTIONS

Line Selector LS-2

Controls switching from solo to backing and also amp selection.

History of BOSS

The rich history of BOSS compact pedals began with the OD-1, which set a new standard for compact pedals. Among the OD-1's innovations were an electronic switch for noise-free effects on/off, an LED battery check, easy battery replacement, and the world's first external power source for compact pedals. Other

BOSS "firsts" include double concentric control knobs, which first appeared on the SD-2 Dual Over Drive. This innovation gave guitarists more sound options than had ever been available on compact pedals. Another first was the double-layer PCB circuit board designed for the DD-5 Digital Delay which offered functions

equivalent to high-performance studio rackmount models. BOSS also offered the world's first bass synthesizer in a compact pedal. So, while a BOSS pedal may look like an ordinary stomp box on the outside, the technology inside has made guitar history.

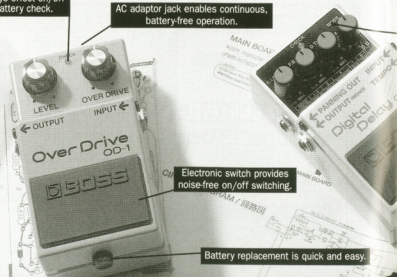
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Indicator displays effect on/off status and battery check.

AC adaptor jack enables continuous, battery-free operation.

Electronic switch provides noise-free on/off switching.

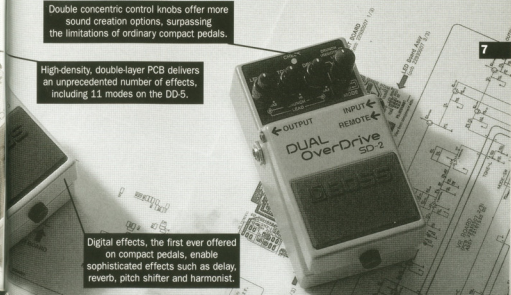
Battery replacement is quick and easy.



Double concentric control knobs offer more sound creation options, surpassing the limitations of ordinary compact pedals.

High-density, double-layer PCB delivers an unprecedented number of effects, including 11 modes on the DD-5.

Digital effects, the first ever offered on compact pedals, enable sophisticated effects such as delay, reverb, pitch shifter and harmonist.



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Guitar — offering more tonal depth than any other instrument

The guitar gives you expressive options that go beyond the amp, effect, or even the guitar model used. Everything from the type of pickup, string gauge, picking strength, and picking position contributes to the overall tonality. That's why playing rock guitar is so awesome — no other instrument gives you so much freedom to create your own signature sound.

String gauge or pitch influences guitar tonality.

Distortion effects change greatly depending on specific pickup types, such as single-coil or Humbucking.

The tone control on the guitar helps to vary distortion effects.

Pickup position also counts. With the pickup close to the neck, a mellower, rounded sound is produced, while using the pickup near the bridge produces a sharper sound.

The quality of the shielded cord affects the sound quality.

Overdrive & Distortion

A key component of creating your sound, distortion effects units fall into two categories:

- **Overdrive:** Produces the natural, warm-sounding distortion like the sound of an overdriven tube amp.
- **Distortion:** Creates harder distortion effects ideal for heavy metal and hard rock.

Distortion effects: Yesterday...

Back in the days when PA systems were designed strictly for vocals, the only way to boost guitar volume was to turn your amp up to 10. Distortion effects occurred naturally as input signals overloaded the vacuum tube preamp and output stage as well as the speakers. A beneficial side effect was the unique tones that distortion created.

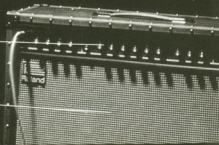
Amp volume and tone control are crucial to getting your sound.

Amp sound characteristics depend not only on the output stage but on the cabinet and speakers as well.

ADD DISTORTION

... and Today

Distortion has evolved from simple overdrive into a wide variety of effects. Consequently, today's guitarists are very particular about effects units, amps, and the type of distortion they want. BOSS knows that and offers a wide selection of Overdrive and Distortion units.



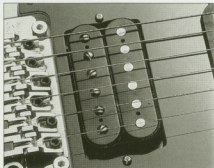
Distortion varies depending on the type of guitar

There are two main types of guitar pickups, and they form the basis of an electric guitar's sound.



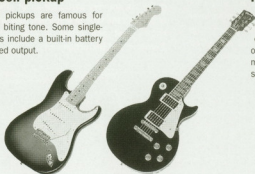
Single-coil pickup

Single coil pickups are famous for their clear, biting tone. Some single-coil pickups include a built-in battery for increased output.



Humbucking pickup

Humbucking pickups consist of two single coils aligned with opposing magnetic fields. This type of pickup provides higher output, more distortion, and a darker, fatter sound compared to single coils.



SD-1 SUPER OverDrive

The SD-1 produces the warm, smooth distortion of an overdriven tube amplifier while maintaining the subtle nuances of your picking technique. BOSS's unique asymmetric overdrive circuitry delivers a genuine overdrive effect for a classic guitar sound. A tone control is also provided for precise tonal adjustment.

USING THE SD-1

To produce a mild overdrive sound:



Set the DRIVE control at a lower level and avoid excessive TONE levels. Good for a bluesy sound.

To produce a hard overdrive sound:



Turn DRIVE all the way up and boost the highs with the TONE control.

To use as a booster:



Set DRIVE at a lower level and turn LEVEL all the way up. With this setting, the SD-1 functions as a gain booster, augmenting amp distortion and providing deeper, thicker sounds.



SD-2

DUAL OverDrive

The SD-2 features independent circuits to produce two totally different overdrive effects. In LEAD mode you get a thick, smooth sound. CRUNCH mode gives you a fat, crunchy sound that's tailor-made for riffs and backing parts. You can even independently modify these two tones with the dual-purpose LEVEL, TONE, and DRIVE controls. What's more, the LEAD and CRUNCH modes can be switched with the pedal switch or optional FS-5L.

USING THE SD-2

To switch between light-distortion rhythm and long-sustain solos:



Set the CRUNCH mode for light overdrive, and the LEAD mode for sustained distortion. Optimize the LEVEL for each and use a remote footswitch to switch between the two.

To switch between hard-distortion backing and crunchy solos:

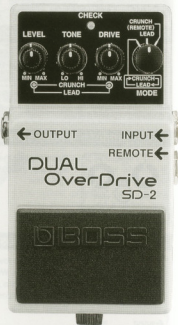


For rhythm, set the LEAD channel for deep distortion and use a moderate LEVEL setting. For solos, use the CRUNCH channel for a fully distorted hard-core sound.

To switch between clean, crunch and lead:



For a clean sound, switch the SD-2 off using the effect on/off. With the effect on, you can use an optional footswitch such as the FS-5L to switch between CRUNCH and LEAD. This gives you instant access to three different sounds: clean, crunch and lead.



OD-2R

TURBO OverDrive

Incorporating two overdrive circuits, the OD-2R gives you a choice of two different overdrive effects accommodating a broad range of performance styles, from light to hard rock. The TURBO Off mode provides a standard overdrive effect with mild distortion, and the TURBO On mode combines overdrive with screaming hard distortion.

USING THE OD-2R

For natural overdrive:



This setting is best for getting a warm, mild overdrive sound with lots of pick sensitivity.

For hard rock:



This setting gives you a heavy distortion even when using single-coil pickups. Provides plenty of sustain for lead work.

For a mellow overdrive sound:



This setting gives you a unique mellow overdrive that's great for chording.



BD-2

Blues Driver

The BD-2 is like having a bluesy, vintage tube amp in a compact effects pedal. Whether it's warm, natural overdrive or full-blown distortion, the BD-2 delivers all the expressiveness your guitar is capable of, complete with all the subtle nuances of your playing style. Sound control is as easy as using your favorite amp.

USING THE BD-2

To produce a mild overdrive sound:



This setting brings out every nuance of your picking dynamics, and responds differently according to your guitar's control settings. Set the TONE any way you like.

For hard overdrive:



Perfect for hard rock with a bluesy touch. Turn GAIN to just about max with TONE set slightly lower.

For using the BD-2 as a booster:



Set DRIVE to a lower setting and turn LEVEL up. TONE should be adjusted to match your amp's characteristics.



PW-2

Power Driver

The PW-2 Power Driver makes you sound like you're playing through a tube amp stack. A MUSCLE control gives your distortion an intense mid-range boost, while a FAT control gives you chunky low-end distortion. Great for power chords and head-turning leads.

USING THE PW-2

For fat, high-sustain solos:



Set DRIVE to an ample level. Crank up the bottom with FAT and the mid-range with MUSCLE. Gives you an ultra-thick, sustained sound that's great for solos.

For earth-shaking power chords:



Crank FAT all the way up for playing power chords. Turn MUSCLE down for a more metallic sound. Gives you a bottom-heavy attack with smooth sustain.

For natural, bluesy overdrive:



This setting gives you a great blues rock sound. Turn DRIVE down to get a natural overdrive sound, and control the level of distortion with your guitar volume.



OS-2

OverDrive/Distortion

The OS-2 gives you a choice of overdrive or distortion or lets you combine both — all in a single compact pedal. This integration gives you more options than using serially connected units, and provides hard distortion that maintains the subtle nuances of single-coil guitar pickups.

USING THE OS-2

For natural overdrive:



Turn the COLOR control all the way to the OD side. With this setting, the OS-2 functions strictly as an overdrive effect. Turn DRIVE all the way up to MAX to get hard distortion. This is a perfect sound for Humbucking pickups.

For nasty distortion:

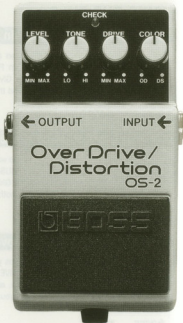


Turn the COLOR control all the way to the DS side. With this setting, the OS-2 functions strictly as a distortion effect. Turn DRIVE all the way to MAX to obtain a distinctive distortion sound with a hard edge.

For a mixed overdrive/distortion sound:



Set the COLOR control right in the middle to get a mixture of overdrive and distortion sounds. Apply a strong dose of DRIVE for a thick, versatile sound.



DS-1

Distortion

The DS-1 provides a harder distortion effect for guitar and keyboard sounds. Instead of toneless, fuzzy distortion, the DS-1 faithfully reproduces all the subtle nuances of your playing dynamics, from whisper-quiet to screaming loud. The onboard TONE control allows you to tailor the overall sound to your liking.

USING THE DS-1

For mild distortion:

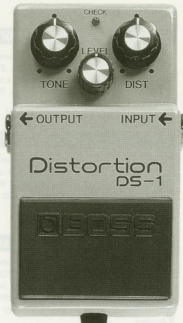


This setting gives you mild, mellow distortion. For best results, use your pickup closest to the neck.

For hard distortion:



For this setting you should use your bridge pickup. When the TONE level is raised, highs are strengthened and a powerful distortion effect results. Adjust the amp and guitar volume carefully to avoid excessive effect depth.



DS-2

TURBO Distortion

The DS-2 features twin TURBO modes. TURBO Mode I produces warm and mellow distortion with flat frequency response. TURBO Mode II provides biting distortion with a mid-range boost that's great for leads. The built-in remote jack allows you to connect an external footswitch such as the FS-5L for instant, hands-free switching between modes.

USING THE DS-2

For standard distortion:



This setting gives you standard Turbo Mode I sounds. Even with DIST all the way up, you get a smooth, hard distortion without breakup. This is an effective setting for solos.

For hard rock chord work:



Turbo Mode II gives you a full mid-range sound. Set DIST at a moderate level to obtain a rough, street-level sound. This setting is ideal for hard rock chord work.

For a grunge fuzz sound:



This is where Turbo Mode II really shines. Turn DIST and TONE all the way to right. The result is a savage distortion sound with distinctive filtering. Perfect for alternative and grunge music.



HM-3

HYPER Metal

The HM-3's internal circuitry is designed for greater gain and accurate dynamic response to produce a powerful, hard-edged sound with awesome sustain — just like you'd expect from fully overdriven stacked tube amps. Using independent COLOR MIX controls for high and low frequencies, you can create just about any tone from mild and crunchy to heavy and metallic.

USING THE HM-3

For a contemporary hyper-metal sound:



This setting gives you a hard metallic distortion and lots of presence. Perfect for solos as well as backing.

For thrash metal:



Set DIST lower to keep your sound from getting too muddy. The resulting crisp sound with boosted highs is perfect for busting down concrete walls and melting steel alloys.

The perfect setting for bluesy solos:



For maximum sustain, set DIST to the max and cut HIGH slightly to prevent feedback. This setting lets your guitar solos really sing when playing bluesy stuff.



MT-2

Metal Zone

Equipped with a dual gain circuit, the MT-2 provides super-long sustain and heavy mids and lows like a stack of overdriven amps. With three-band EQ, a wide range of distortion textures is at your command.

USING THE MT-2

For a fat metal sound:



Boost the highs and lows with EQ. Great for metal solos and riffs.

For aggressive thrash metal:



To get the MT-2's unique, extremely distorted sound, boost HIGH and LOW and cut MID. Set DIST fairly high. This is a no-holds-barred, aggressive sound ideal for thrash metal.

For '70s power rock:



This setting gives you a great '70s power rock sound with fat, powerful mids – great for arena-rock riffs. After boosting the mids, find the best sound by adjusting the FREQ control.



XT-2

Xtortion

The XT-2 provides a cutting-edge, '90s distortion sound that can sing as well as grind. The PUNCH control adds a midrange edge, while the unique CONTOUR control cuts highs or boosts highs and lows. The XT-2 is a versatile pedal that lets you get any sound from thrash metal to grunge to hard rock.

USING THE XT-2

For grunge distortion:



Set CONTOUR all the way up for driving distortion with boosted highs and lows. Turn up PUNCH for a big mid-range sound. Ideal for grunge or power metal.

For a solid rhythm guitar sound:



This setting gives you a great British-style rhythm guitar sound. Turn down PUNCH to obtain light distortion with attenuated mid-range. Increase CONTOUR slightly to add dynamics.

For hard-edged distortion:



Turn PUNCH all the way up for powerful mid-range. Set CONTOUR lower to preserve the hard edge.



FZ-2

HYPER Fuzz

The FZ-2 recreates the classic fuzz tone sound characteristics of '60s guitar greats, which is re-emerging as an integral sound of the '90s. With 3 modes and 4 different controls, you can use the FZ-2 to create a wide variety of fuzz tone sounds. You can also use the FZ-2 as a convenient gain booster.

USING THE FZ-2

For a classic fuzz sound:



This setting gives you vintage fuzz tone with plenty of harmonics and distortion. By lowering your guitar tone and selecting your front pickup you can get a ring modulation-style effect.

For an in-your-face grunge tone:



Put the FZ-2 in Fuzz II mode and set the TREBLE TONE and GAIN to maximum. This lets you create an awesome grunge sound.

To use the FZ-2 as a treble booster:



Set the FZ-2 to the GAIN BOOST mode and put it before another distortion unit and your amplifier to add extra punch for a powerful distortion tone.



FZ-3

Fuzz

The FZ-3 offers a straight-ahead, '60s-style fuzz sound. In addition to its classic sound, the FZ-3 sports a cool retro look with a metallic finish.

USING THE FZ-3

For single-coil guitars:



For a single-coil guitar with low output, turn up the FUZZ control. Turn it all the way up for even wilder sounds.

For Humbucking guitars:



For a Humbucking guitar with a higher output, setting the FUZZ control at a modest level makes it easier to control your sound. Picking dynamics on the neck pickup optimizes the FUZZ's unique harmonics effect.

For bass guitars:



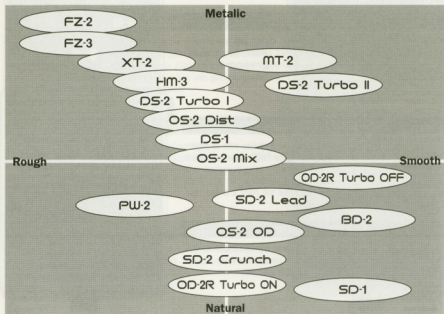
Fuzz sounds great with bass guitars, too. Make sure your bass's tone control is set toward the treble position.



For a great guitar sound, start with the right distortion.

BOSS offers an extensive range of distortion effects and each has a distinct sound. Thirteen different models are available, from the SD-1 with its warm and natural overdrive, to the MT-2 with its smooth high-gain metallic sound, to the FZ-2 for radical fuzz. The table at the right indicates each unit's specific characteristics. Refer to it to choose and create your own killer sound.

Distortion Table



Guitar Amp Settings

Amp setups are a key element of your guitar sound, especially amps with the popular three volume stages. Typically, you set the amount of overdrive/distortion using **GAIN** and **VOLUME** and adjust the overall volume with **MASTER**.

For a clean sound:



Turn MASTER up and use the guitar's VOLUME to get the level you want, always keeping it below overdrive thresholds.

For hard distortion:



Turn MASTER up just a little, and gradually increase GAIN and VOLUME. When the distortion is at the level you want, adjust the overall sound level with MASTER.

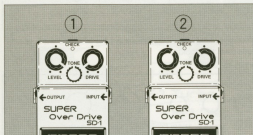
For mild distortion:



With GAIN set at center position, raise VOLUME for a mild, fat overdrive. When the level is where you want it, shape your tone as desired with BASS, MIDDLE and TREBLE TONE controls.

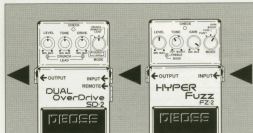
Boost Tips

Using an overdrive unit:



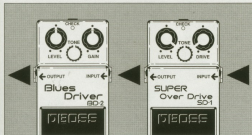
As the signal input to the amp increases, the distortion gets harder. Using an overdrive unit, raise the input signal gain. Here are two typical setups. Setting the amp for crunch gets the best results.

With the FZ-2:



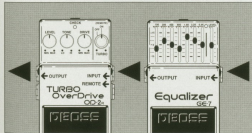
In GAIN BOOST mode, the FZ-2 lets you add punch and power to amp distortion or lets you boost gain only without more distortion intensity. Or if you prefer, just boost gain and retain the guitar's original tonality. The FZ-2 also performs as a great treble or bass booster using its TONE control.

Using two distortion units (SD-1 + BD-2):



When using the SD-1 to boost gain, set the SD-1's DRIVE control lower and LEVEL higher. Set the BD-2 for normal distortion. For backing, only switch on the BD-2. For solos, stomp on the SD-1 for harder-edged distortion. Remember that noise or feedback can occur depending on the effect's settings when using it as a booster.

Using an equalizer or compressor:



An equalizer and compressor can also be great boosters. Using the equalizer will raise gain as well as emphasize distortion over a specific frequency range. Using a compressor can also create a distinctive boost by varying tone and attack.

ADD ACOUSTIC DIMENSION

Delay & Reverb

These effects simulate natural echo and let you add the spacious ambiance of differently sized rooms.

- **Delay:** Digitally records the input signal and delays it for the time specified, then plays it back for a natural "echo" effect.
- **Reverb:** Combines multiple digital delays to simulate different sound decay characteristics from small rooms to large halls.



Tips Reverb Unit

Reverb Time sets the length of reverberation or decay, while Reverb Level controls reverb intensity. For clean, light reverb, reduce the reverb level and set a longer reverb time. More level and a shorter time provide reverb that's thicker sounding. The TONE control can be used to add brightness or depth to the sound. Key to making a great sound is to start with milder settings and then go for more radical sounds.

Tips Delay Unit

- To double sound for a duet in unison, use short delay times (50ms or less) and cut feedback so only a single delay is produced.
- Keeping the direct sound and delayed sound separate creates a full, stereo effect.
- Cut the delay time way back to get a distinctive short delay.
- A reverb-like delay can be obtained by using about five delays at 100 - 200ms and setting a low volume.
- Selecting a delay time longer than 300ms and matching it to your song's tempo produces a pulsing delay that emphasizes the song's beat. Increasing the delayed sound delivers an effect that's like sequencing phrases.
- Using long delay times (800ms or longer), you can play harmony lines over the delayed sound.

DD-5

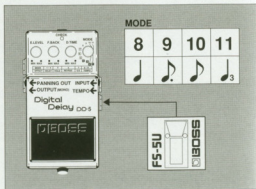
Digital Delay

The compact, full-featured DD-5 offers delay times ranging from 1ms all the way up to 2,000ms, just like expensive rackmount units. This versatile multifunction unit has 11 different modes. The TEMPO mode is for setting delay time in realtime. The HOLD mode lets you record and play back a phrase as long as 2,000ms. A popular REVERSE mode is also included as well as a stereo output for a more spacious sounding delay.

USING THE DD-5

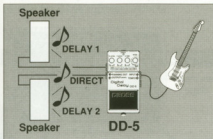
For setting delay time in realtime:

Select mode 8 and connect an FS-5U footswitch to the TEMPO jack. Tap it four times in realtime at your song's tempo. You'll instantly get a delay time that's ideal for the tempo you're playing.



For stereo panning:

This setting routes the delayed sound to both OUTPUT and PANNING OUT so that the delay dynamically pans back and forth from the left and right speakers.



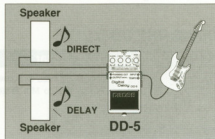
For realtime phrase sampling:

In mode 5 (HOLD), you can digitally record phrases you play in realtime. Press the pedal to start recording a phrase. Release it to stop recording. Playback starts automatically with endless repeats.



For stereo doubling:

Mode 7 outputs dry sound from PANNING OUT and delayed sound from OUTPUT. Adding a short delay (50ms or less) creates a spacious stereo doubling sound.



For backward guitar:

Mode 6 (REVERSE) allows you to generate backward guitar effects by reversing the digitally recorded delay, just like playing a tape backward.



DD-3

Digital Delay

This compact pedal provides a digital delay effect with outstanding quality equivalent to that of a dedicated rack-mount delay unit. In addition to three delay time modes, a DELAY TIME control is furnished, giving you speedy, precise adjustment of delay time continuously within a range of 12.5ms to 800ms. The HOLD function repeats the delay indefinitely.

USING THE DD-3

To produce a twin guitar sound:



Set the MODE knob to 200ms. Turn the F.BACK control to MIN to get a single delay.

For a reverb-type effect:



Great for starting a song with a hard rock guitar riff. Delay time ranges from 50 to 200ms.

For a sitar-like effect:



Turn the F.BACK control to MAX, then connect an unconnected plug to the direct out.



RV-3

Digital Reverb/ Delay

The RV-3 is a 16-bit pro-quality combination reverb and delay pedal. It offers four different high-density reverb modes plus three delay modes offering delay times up to 2,000ms. There are four modes for a simultaneous delay (32 to 1,000ms) and reverb effect using your choice of Room 1/2, Hall and Plate reverb types. Uses BOSS's original AF A/D conversion for great sounding effects.

USING THE RV-3

For a big hall effect:



This setup simulates the sound of a large hall, characterized by soft reverberation with long decay.

For a guitar solo:

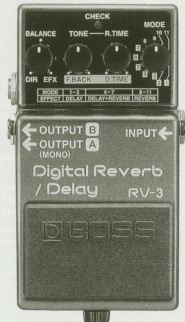


A great-sounding delay/reverb combination with plenty of depth. Makes your guitar stand out from all other instruments.

For a marble-walled room effect:



Simulation of a room with very hard walls, such as marble, for a distinctive-sounding reverb.



MODULATE AND DOUBLE SOUNDS

Chorus, Flanger, Phaser, and Tremolo effects create various sounds from brilliant, shimmering textures to swooshing jet-plane effects.

- **Chorus:** Adds spaciousness and dimension for a thicker, rich sound.
- **Flanger:** Adds a swirling effect to create a modulated sound. Use a distortion unit at the same time to obtain powerful jet-like effects.
- **Phaser:** Provides a unique effect similar to a rotary speaker. Compared to a flanger, the phaser produces a softer, fuller sound.
- **Tremolo:** Varies the volume of the original sound cyclically to create a pulsating effect.



Tips Using different types of chorus

The chorus effect varies depending on whether it is used in mono or stereo. When used in mono, chorus provides a denser sound. When used in stereo, a spacious sound with less detuning is obtained.

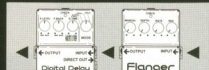
Tips Use a flanger unit to create a short delay

The basics of a chorus and flanger are similar to a delay, and so is the circuitry. For example, turning flanger resonance down to 0 produces a chorus sound, while zeroing out all flanger controls results in a unique short delay.



Tips Combine short and long delays

If you combine a flanger and delay, you can add a flanger-created short delay as well as a long delay to the sound. The short delay and long delay sounds contain distinctive reverb which offer spaciousness and richness.



Tips Using chorus with other players

When a guitarist and a keyboard player are both playing with a chorus effect, the sound can become muddy. Sometimes it sounds better to use a clean, "un-effected" sound when playing with a chorused synth or electric piano.

CE-5

Chorus Ensemble

The CE-5 chorus covers a wide frequency range and features high- and low-cut filters. This lets you create any kind of chorus effect from a mild, natural chorus to the clear and penetrating stereo chorus effect popular in contemporary music.

USING THE CE-5

For a contemporary chorus effect:



Set both the high- and low-cut filters to flat for a contemporary chorus sound with a wide frequency response.

For a warm, vintage chorus:

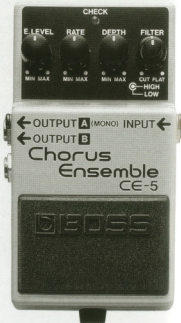


Use the two filters to cut both high and low bands.

For a vibrato effect:



Turn the RATE to max and adjust the high-cut filter to produce mild vibrato. For a really great effect, match the vibrato rate to the tempo of the song you're playing.



CH-1

SUPER Chorus

The CH-1 SUPER Chorus features sharp sounds with clear highs, and a stereo effect that varies depending on the spacing between the left and right speakers. The EQ function allows you to adjust the tonality from soft, mellow sounds to sharp, cutting sounds ideal for rhythm guitar.

USING THE CH-1

To produce a popular chorus sound:



This setting provides a beautiful and popular chorus effect. Turn EQ to the left to cut highs to create a milder chorus sound, which is unique to analog chorus.

When playing arpeggios:



Turn DEPTH to the right to obtain an intense chorus effect. Boost the highs with EQ to get a brilliant effect.

For guitar solos with vibrato:



Turn RATE all the way up to obtain a light pulsating effect. Try matching the chorus rate to the song tempo.



BF-2

Flanger

A flanging effect is produced by combining the original signal with an electronically delayed signal. Using four controls, you can tailor a variety of sounds from dynamic jet-plane effects to short delay, chorus and vibrato sounds. When the BF-2 is connected to a distortion unit, even more radical effects are at your command.

USING THE BF-2

To produce a hard flanging sound:



Combine the BF-2 with a distortion unit. Also adds density to metal music.

Metallic flanging:



Increase the RES level and turn the DEPTH to 0 for a metallic flanging sound.

For a swirling chorus sound:



Set RES to a low level and DEPTH to a high level.



PH-2

SUPER Phaser

The PH-2 adds an effect similar to that of a rotary speaker, with a phase shift circuit that provides twelve stages of adjustment for smooth, professional-sounding phasing. Two modes give you completely different tonal characteristics: one for a standard effect, and the other for a deep, rich phased effect ideal for a funky guitar sound.

USING THE PH-2

For chord work:



Adds a light phase effect for smooth, full chords.

For reggae rhythms:



Set Mode to II, which gives you a sharp, intense sound using filtering.

For fusion and funk rhythms:



Turn DEPTH all the way up for a deep phase sound. Provides a sound suitable for muted-picking rhythm techniques.



TR-2

Tremolo

The TR-2 gives you vintage tremolo sounds like the classic '60s amps with built-in tremolo. The secret is an LFO waveform with the duty ratio carefully set to an optimal value for guitar. The TR-2 also features a WAVE knob, which lets you alter the LFO waveform from triangle to square, allowing a wider range of tremolo variations.

USING THE TR-2

For vintage tremolo:



This setting sounds like the built-in tremolo on vintage amps. Use a single-coil pickup in the rear position and add reverb to get a classic surf-rock sound.

For an electric piano sound:



To get the smooth tremolo sound used with electric pianos, set RATE low and WAVE to a triangular wave. The slow RATE is the key to getting a pronounced, hypnotic tremolo effect.

For a "stuttered" sound:



Turn WAVE all the way to the right for a stuttered, staccato tremolo sound.



CHANGE TONALITY OF SOUNDS

Equalizer, Wah & Acoustic Simulator

Use these effects to tonally shape your sound.

- **Equalizer:** Lets you boost or cut frequency bands. Two types of equalizers are available — a graphic equalizer that provides easy confirmation of set boost/cut points and a parametric equalizer with continuously variable boost/cut points.
- **Foot Wah:** Provides pedal control over the filter's midrange with a sharp peak.
- **Auto Wah:** Automatically creates a foot wah effect depending on your picking dynamics.
- **Acoustic Simulator:** Makes an electric guitar sound like an acoustic.

Tips GE-7 + GEB-7 = 14-band EQ

Combining the GE-7 for guitar and the GEB-7 for bass gives you a 14-band graphic equalizer, enabling a wide range of tonal control.



Tips Equalization adds a new dimension to guitar solos

When you use an equalizer before a distortion unit, connecting another equalizer after the distortion unit lets you add emphasis to certain frequencies to make solos "cut through."



GE-7

Equalizer

The GE-7 has seven bands ranging from 100Hz to 6.4kHz, ideal for guitar sounds, with boost/cut of +/- 15dB per band. This lets you completely control your sound and eliminate unwanted feedback, particularly when connected after a distortion effect.

USING THE GE-7

For sharp rhythm sounds:



Cut the middle frequency bands around 800Hz and boost at 1.6kHz.

For powerful guitar solos:



Boost the middle frequency bands slightly and connect the unit after distortion and overdrive. Set the LEVEL control a bit higher than normal.

For a metal sound:



Cut the middle band around 800Hz and boost the lower and higher frequency bands. Place the GE-7 after the distortion or overdrive unit.



FW-3

FOOT WAH

The FW-3 is much more versatile than conventional wah pedals. The PEAK control gives you a broad selection of wah effects from soft filtering to a sharp wah. By connecting a footswitch to the FW-3's Remote On/Off jack, you can easily switch the wah on or off, regardless of pedal position. The FW-3 incorporates a short stroke that matches the stroke of rhythm guitar, a feature that's ideal for '70s funky rock.

USING THE GE-7

For sharp rhythm sounds:

Connect the FW-3 before the distortion unit and use the pedal to add tone color to your phrases. The FW-3 can also be used as a midrange peak booster with the pedal depressed halfway.



For powerful guitar solos:

Set the FW-3's PEAK control to rotate clockwise to add a powerful wah effect to a distorted sound.



AW-2

Auto Wah

The AW-2 delivers a wide variety of wah effects, including a dynamics-sensitive picking wah that changes with your picking strength and a modulation wah for automatic wah over a cycle of modulation. There's also an extra-powerful wah that combines the two effects. With the **MANUAL** control, you can set the frequency point of the wah effect to get exactly the sound you want.

USING THE AW-2

For picking wah:



This allows you to control the wah effect with string picking strength. Adjust the **SENS** control to match your guitar's output level and playing style.

For modulation wah using the **MANUAL** control:



Use the **MANUAL** control to add a funky touch to the modulation wah. This setting is for when you want to add modulation wah in the low frequency range.

For a combination picking/modulation wah:



For a wah effect that really stands out, use a setting that lets you use picking wah and modulation wah simultaneously. Adjust the **SENS** control so that modulation wah occurs during the decay of your sound.



AC-2

Acoustic Simulator

The AC-2 is a revolutionary compact effects pedal that makes your electric guitar sound like an acoustic. You can get a variety of acoustic guitar sounds using the AC-2's four modes: Standard, Jumbo, Enhance and Piezo. Two individual outputs allow switching between an acoustic sound and a direct electric sound with one stomp of the pedal.

USING THE AC-2

With a neck-position single-coil pickup:



This gives you the unique resonance of an acoustic guitar along with well-balanced dry sounds from the first and second strings. Try finger picking.

With a bridge-position single-coil pickup:



Boost the **BODY** control to get more simulated body resonance. This setting lets you get bright sounds even when playing through an amp with limited high-end response.

With a bridge-position Humbucking pickup:



Boost the highs with the **TOP** control, and cut the lows with **BODY**. Perfect for getting a sound with fat mids and lows.



REGULATE GAIN LEVELS

Compressor & Limiter

- **Compressor:** Reduces hot signal levels and boosts low input levels for a more consistent, balanced sustain with no distortion.
- **Limiter:** Works to cut only input peaks above a preset threshold, leaving the original sound quality unchanged.

Tips A compressor vs. a limiter

While a limiter cuts only the peaks, a compressor acts on the entire signal for overall sound control and produces a sustain effect. Compressors are used to create different sounds — a mellow sound, sustained overdrive using an overdrive unit, or synth-like sounds by combining with a chorus effect. A limiter is mainly used for controlling an overall sound, such as balancing a rhythm sound, keeping an amp or VU meter from overload, or blunting sharp edges of sounds.



CS-3

Compression Sustainer

The CS-3 compresses high-input signals while boosting low-input signals, giving you smooth sustain without degrading the quality of the original sound. A range of effects from gentle compression to squeezed sounds is at your command. Designed for outstanding low-noise performance, the CS-3 also provides EQ for precise sonic control.

USING THE CS-3

For a mellow sound:



This setting is ideal for solos in ballads or mellow songs. Add a chorus effect for even more depth.

For chord work:



This setting balances the volume of each string for smooth chord accompaniment.

For thick, rich sounds:



Add Chorus and Delay after the Sustain effect. This setting is good when playing sustaining chords.



CHANGE A SOUND'S PITCH

Octave & Pitch Shifter

These effects change the pitch of the original sound and can simultaneously output it with the dry signal to produce harmonies.

- **Octave Unit:** Produces sound that's one and two octaves lower than the original signal. These are heard along with the dry sound for a much bigger sound.
- **Pitch Shifter:** Lets you easily shift pitch at various intervals for different effects.
- **Harmonist:** An intelligent pitch shifter that adds a beautiful and musically correct harmony according to the key you determine.

Tips Using an octave effect before a distortion unit

An octave effect can be used to create a monster distortion sound when connected before a distortion unit. To maintain accurate pitch, connect the Octave as close as possible to the guitar in the signal chain.

Tips Whammy bar effects via foot control

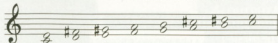
You can control the pitch shift amount of the PS-3 in realtime by connecting an expression pedal to the unit. Using the pedal allows you to produce whammy bar effects even if the guitar does not have a vibrato arm.

Conventional pitch shifter vs. intelligent pitch shifter

A conventional pitch shifter's effect conforms to the direct sound, always maintaining the pitch interval you've set. But an intelligent pitch shifter automatically detects guitar signal pitch and adds correct harmony to the notes played by altering the pitch shift amount as required for more musical enhancement. You can make your choice depending on your specific application.

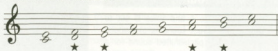
Use a conventional pitch shifter for:

- rock riffs with pitch shifted up a fifth and down a fourth
- a synth-like sound by going up a fifth and up one octave
- whammy bar effects in conjunction with an expression pedal



Use an intelligent pitch shifter for:

- incredibly beautiful twin-guitar harmonies
- quick single-note passages
- rich guitar orchestration



HR-2

Harmonist

The world's first intelligent pitch shifter in a compact pedal, the HR-2 lets you select any suitable key from 12 Key Modes like major and minor in each semitone. This instantly adds correct 2-voice harmony to a guitar phrase. A new high-speed detection circuit ensures lightning-fast response to speed-picking passages. A Detector In jack allows correct pitch detection when combined with other effects.

USING THE HR-2

For a twin lead sound:



To sound just like two guitarists playing the same phrase, set only Voice A to +3.

For guitar orchestration:



Try setting Voice A to -4 and Voice B to +3 to create very impressive guitar orchestration by layering a two-voice harmony on top of the original guitar signal.

For a detuned sound:



With both Voice A and Voice B set to Detune, the direct sound is overlapped with a slightly pitch-shifted sound for a thick, rich, chorus effect.



PS-3

Digital Pitch Shifter/Delay

The high-quality PS-3 combines a pitch-shifter and delay. It has seven pitch shift modes, three delay modes (2,000ms. max.) and an expression mode. Pitch shift amount is selectable in 26 steps — 24 chromatic steps over a +/- 1 octave range plus 2-octave up-down capability. This enables true 2-voice pitch shifting, a first in compact effects pedals. Uses the BOSS original AF A/D conversion method.

USING THE PS-3

For a ring modulated sound:



A tremolo-like effect can be obtained by greatly increasing the pitch shift amount with mode 5. This effect creates a ring modulated sound.

Detune Chorus:

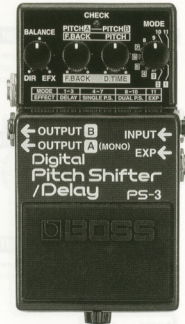


Creates a chorus sound that has minimal fluctuations.

For a major chord sound:



This setup adds third and fifth notes to the original note to create a major chord sound. To get a more spacious sound, try lowering the thirds by one octave.



OC-2

Octave

Three separate tones are reproduced by the OC-2 — the original tone, a second tone one octave below the original, and a third tone two octaves below the original. With just a single guitar, you can obtain sounds three octaves thick, and each part has a separate volume control. The OC-2 features natural, clear octave sounds with stable pitch even for staccato picking sounds.

USING THE OC-2

To simulate unison guitar and bass:



Turn up the volume level of OCT 2 to simulate playing in octaves with a bass guitar. Use with a distortion unit for thicker sound.

To simulate a guitar synthesizer:



Turn the OCT 1 control all the way up to produce a thick sound.

For fat guitar riffs:



Turn up the volume of OCT 1 and add distortion and overdrive effects.



REDUCE NOISE

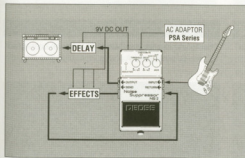
NS-2

Noise Suppressor

The NS-2 effectively eliminates noise and hum of the input signal while preserving the original sound's tonality. The natural attack and envelope are unaffected thanks to BOSS's unique noise detection circuit that precisely separates the guitar sound and the noise components.

USING THE NS-2

An effect unit which is a potential source of noise is connected to the Send/Return jack. Connect a delay after the NS-2, not to the effects loop, in order to preserve its natural quality. When connected to an AC adaptor, the NS-2 supplies power to other effect units.



*Use a Roland PCA-20A (8PIN parallel) power connection cable.





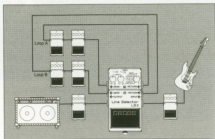
LS-2

Line Selector

The LS-2 makes it easy to switch settings among several effects and to route input and output signals. Two line loops and six looping modes provide a wide variety of applications. Used with an AC adaptor, the LS-2 can also supply 9V DC power to several BOSS compact pedals. This makes it an ideal power supply and master switching unit for multiple effects setups.

1 A ↔ B mode

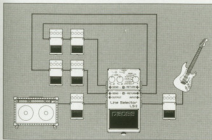
Effects you use for your backing sound are connected to Loop B, while Loop A is used for solos and riffs.



* Use a Roland PCA-20A (8-PIN parallel) power connection cable.

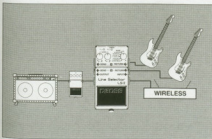
2 A + B MIX / BYPASS mode

This setting lets you mix a solo sound on Loop A and a backing sound on Loop B.



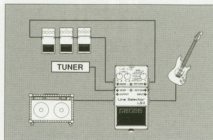
4 A → B / BYPASS mode

This setup lets you switch between Strat and Les Paul-type guitars or between a guitar and synthesizer.



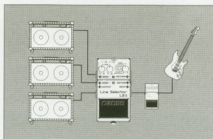
3 A ↔ B mode

This setup is for switching between an effects loop and tuner. Switch to mode B during live performance for silent tuning.



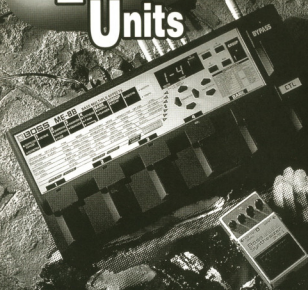
5 OUTPUT SELECT mode

This setup lets you choose between two or three outputs such as switching from a tube amp to a transistor amp to a monster stack, etc.



Bass Effect Units

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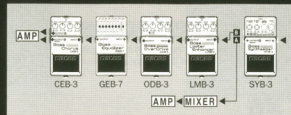
Designed exclusively for bass frequencies

Guitarists use a broad range of effects units to get their sound, and BOSS offers that same power and versatility to bass players with a complete lineup of compact bass pedals. BOSS bass pedals are specially designed for the wide frequency band of the bass guitar, including six-string basses. For example, on a regular graphic EQ, the frequency bands are equally divided. On a bass pedal such as the GEB-7 the frequency bands are divided into optimal ranges for bass guitar. On the CEB-3, a special circuit applies chorus only to the highs of the bass sound. This provides a colorful chorus effect while preserving the powerful low end of the bass sound. All models of the series are exclusively dedicated to bass guitar players.

Tips When multiple bass effect units are combined, the effect is multiplied as well.

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The diagram shows a standard connecting order of five different bass effect units. Connect the CEB-3 Chorus after the ODB-3 Overdrive. To color the overall sound, connect the GEB-7 after the ODB-3. To specifically change distortion characteristics, connect it before the ODB-3. This allows certain frequency ranges to be applied with heavier distortion to give you different types of sounds. Use the SYB-3 in stereo to handle the effected signal and the direct sound separately.



ODB-3

Bass OverDrive

The ODB-3, a standard overdrive unit for bassists, works over the entire bass guitar frequency range including 5-string basses. By mixing the effected sound with the bass signal you always get great sounding distortion while maintaining all the power and presence of the regular expansive bass sound. The ODB-3 also makes a good gain booster.

USING THE ODB-3

For natural overdrive:



One of the great features of the ODB-3 is an extremely wide GAIN range. For this particular setting, however, set the GAIN at a minimum level to create a natural overdrive. Cut the highs with HIGH EQ. Turn BALANCE to the OD side.

For riffs:



Center BALANCE and increase GAIN to achieve harder distortion. This setting is ideal for riffing on a heavy beat.

For a more over-the-top sound:



Raise LEVEL and set BALANCE slightly toward OD. Set GAIN to max.



CEB-3

Bass Chorus

The CEB-3 features a low filter, so you can select the frequency band to which the chorus effect is applied. This lets you get all kinds of chorus effects, from a light chorus on harmonics only to a heavy chorus on all frequency bands. The space synthesis effect incorporated on the CEB-3 guarantees a natural and spacious chorus effect.

USING THE CEB-3

For a modern chorus sound:



Setting LOW FILTER to FLAT adds full chorus to even the lowest notes. The way you use the low filter is the key to obtaining the chorus effect you want.

For a light chorus sound:



With LOW FILTER set to center, increase DEPTH just a bit and set RATE for a slower chorus speed.

For a deeper chorus:



Turn up RATE slightly, and set DEPTH and E. LEVEL to max. Then cut the effected sound's lows with LOW FILTER.



GEB-7

Bass Equalizer

The GEB-7's usable frequency range extends all the way from 50Hz to 10kHz, allowing it to accommodate just about any type of bass guitar, even 5-string basses. Precise tonal adjustment is available through seven frequency bands, providing more control over the all-important midrange which is crucial for achieving a great bass sound. Each band can be boosted or cut over a $\pm 15\text{dB}$ range for the exact tonal shaping you want.

USING THE GEB-7

For standard rock:



This setting gives you a nice, full sound, with a boost at 500Hz and moderate boosts at 400Hz and 800Hz. Cutting 50Hz and 4.5Hz eliminates muddiness and rounds out the tone.

For slap bass:



This setting cuts midrange at 400Hz, while boosting the lows a bit at 50Hz for a bottom-heavy slap. Boosting the highs at 4.5kHz and 10kHz gives you a razor-sharp pop.

To simulate a bass amp:



Cutting the high frequency bands gives you a round sound that effectively simulates the sound of a bass amp.



LMB-3

Bass Limiter Equalizer

The LMB-3 eliminates harsh volume peaks and keeps your sound smooth and controlled, even when using dynamic pop and slap techniques. **RATIO** and **THRESHOLD** controls give you precise control over limiting parameters.

USING THE LMB-3

For use as a limiter:



Set **ENHANCE** to **MIN** and turn **RATIO** fully to $\infty : 1$ to get a consistent, stable bass sound across its wide dynamic range.

For finger picking:



Raise **RATIO** to change the original bass sound's envelope for natural compression.

For slap bass:



Add more **ENHANCE** for greater clarity and presence to make a much more powerful slap sound.



SYB-3

Bass Synthesizer

The world's first bass synthesizer in a standard-sized stomp box, the SYB-3 turns your bass guitar into a synth bass for hip-hop, dance, or urban funk styles. Two separate outputs let you mix a straight bass sound with synth bass, and 11 different modes give you a variety of synth-bass effects. A HOLD function sustains a synth note while you play over the top of it, and a T-Wah effect provides a classic synth-wah tone.

USING THE SYB-3

On the SYB-3, first select the sound character using the mode switch. Then, use SENS/DECAY and FREQ/RES to tailor the sound to your taste. For Modes 1 through 7, SENS/DECAY controls the decay of the filter. For Modes 8 through 11, SENS/DECAY controls how much the input sound is effected. FREQ controls the cutoff frequency of the filter while RES controls the feedback amount of the filter.

SYB-3 MODES

1		▲ (SAW): A sharp-edged sound.
2		□ (SQ): A softer sound than Mode 1.
3	INTERNAL SOUND Pitch and attack data is detected from the input sound to trigger the internal DSP sound source.	□ (PWM): The square wave of Mode 2 is modulated to make a thicker sound.
4		▲ (-1oct): A sawtooth wave one octave below the Mode 1 sound.
5		▲ +Noise: The Mode 1 sound added with noise.
6		□ +Noise: The Mode 3 sound added with noise.
7		▲ +Noise (-oct): The Mode 4 sound added with noise.
8	WAVE SHAPE The input sound is directly processed to create the synthesizer sound.	Up: The cutoff frequency of the filter shifts higher based on the level of the input sound.
9		Down: The cutoff frequency of the filter shifts lower based on the level of the input sound.
10	T WAH An auto-wah effect is added to the bass sound.	Up: The cutoff frequency of the filter shifts higher based on the level of the input sound.
11		Down: The cutoff frequency of the filter shifts lower based on the level of the input sound.



AD-5

Acoustic Instrument Processor

The AD-5 is an electric-acoustic guitar preamp/DI box with powerful built-in effects processing capabilities. With high-quality preamp functions and specially voiced effects optimized to deliver the natural expressiveness of an electric-acoustic guitar, this processor is a "must-have" item for electric-acoustic guitarists.



- Innovative Acoustic Sound Shaping function allows for the creation of acoustic ambiance, turning the sterile, flat sound of a piezo pickup into the rich, "airy" sound of a mic'd acoustic guitar.
- 2x2 CHORUS and plate-type REVERB are optimized for acoustic guitar.
- 4-band EQ and preamp level control are provided.
- Built-in anti-feedback control eliminates annoying feedback instantly.
- Two inputs (for piezo and magnetic pick-ups), balanced XLR-type outputs and unbalanced 1/4" outputs are built-in.

CHALLENGE YOURSELF

CREATING NEW SOUNDS

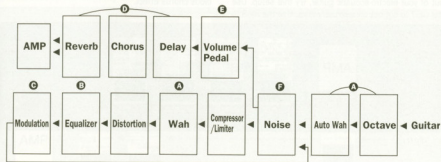
There's nothing more satisfying for a guitarist than creating your own original sounds using a combination of effect units. Here are some samples of different effects settings, from classic rock sounds to special effects. Use these as a reference and a motivation for creating your own cool sounds.



Some basics for making the most of effect units

The following order of connection gets optimal results from each effect unit.

- (A) Effect units that detect an envelope, such as auto wah and octave, should be connected close to the guitar. The wah pedal is generally connected before the distortion pedal so it can regulate the distortion, though hooking it up after the distortion still sounds good. The wah effect varies depending on whether it's before or after the distortion in the signal chain. Try it both ways to see the difference.
- (B) Fine-tune the sound quality with EQ.
- (C) Connect the phaser/flanger/pitch shifter here.
- (D) Decide where to connect chorus/delay/reverb by careful monitoring of the resulting sound.
- (E) Connect a volume pedal before delay effects so that the volume can be lowered without cutting off the reverberation. If connected before the distortion pedal, the volume pedal controls the distortion intensity.
- (F) Connect the noise suppressor here to remove distortion and modulation noise.

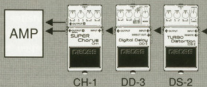


Challenge yourself

Getting a good basic rock sound

This is a setup that's versatile enough to handle any style of rock. Get your initial sound with the DS-2, then add some delay with the DD-3 to get a studio-style pro-

fessional sound. Add chorus for a spacious feeling. Be sure to place your stereo chorus pedal last in the chain, just before your amp.



Electric Acoustic Guitar

For crystal-clear, clean tone or to get the best sound out of your electro-acoustic guitar, try this setup. Use the GE-7 to cut out unnecessary lows. Use the RV-3 to

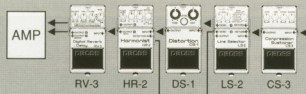
add depth to your sound, and add the CE-5 for a spacious chorus effect.



Intelligent Pitch Shifting

Use the CS-3 for compression to get great sustain. Split the signal with the LS-2 so that a clean signal goes to the HR-2 DECTOR IN and also gets routed to

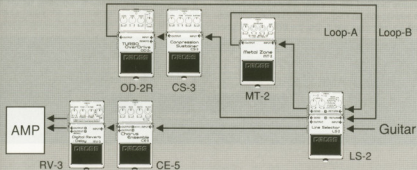
the DS-1 for distortion. Use the RV-3 for simultaneous reverb and delay; for instance, a light reverb with a slapback echo.



Combination Mixing

Connect the MT-2 to the LS-2 A-loop. Connect the CS-3 to the B-loop for a brilliant, immediate sound that's just like recording directly into the board. Set the RV-3 for simultaneous reverb and delay and kick in the CE-5 for

some lush chorus. For solos, switch on the OD-2 in the B-loop. You can also use A+B mode to mix distortion and clear effects for a different sound.

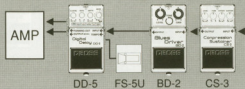


Challenge yourself

Texas Blues

The CS-3 can be used to get the mild, tube-type compression feel of vintage amps. The BD-2 provides a warm, but gritty, blues tone. Plug an FS-5U into the DD-

5 to set the delay tempo in realtime by simply tapping the footswitch four times.



Versatile Set-up

This set-up provides a very versatile guitar sound. The OD-2R is used when you need a slight crunch or thick overdrive tone and can be easily switched between the two sounds with an FS-5L. The MT-2 is used when you need full-out thrash metal. Use the DD-3 as a doubler

set at about 20ms. For chorusing add the versatile CE-5. Its filtering gives you a classic CE-2 warm chorus or a more contemporary sound depending on the settings.



Modern Bass

The AW-2 can be used for a slight wah when funk slapping. Use the LMB-3 for smoothing out peaks, especially when recording. The GEB-7 allows you to contour

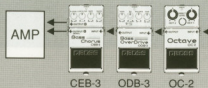
the sound from a fat low end to a bright mid sound or both. Finally, add the CEB-3 for subtle or rich chorus-ing.



Rock and Grunge Bass

Use the OC-2 to get massive sub octaves one or two octaves below the fundamental. The ODB-3 will add anything from slight grit to full-out dirt while preserving

the clarity of the original sound. The CEB-3 can be used for fattening the sound.



**MULTIPLE
EFFECTS**

GT-5

Guitar Effects Processor

When it comes to floor-type multiple effects units, the GT-5 is at the top of its class in both flexibility and quality. A total of 28 effects are provided — the most you can find on currently available guitar effects units. The revolutionary GT-5 combines a studio-quality COSM-based guitar preamp with multi-effects capability — all in a compact, road-ready pedalboard design.



- Powerful distortion results from combining BOSS' traditional analog overdrive/distortion and Roland's COSM-based preamp.
- Digital effects include chorus, tap tempo delay, reverb, harmonist (intelligent pitch shift), and "humanizer," with quality equivalent to studio-use equipment. An Acoustic Guitar Simulator is also built-in.
- A maximum of 15 effects can be used simultaneously. 150 Preset Patches give you maximum firepower for your musical arsenal. In addition, 100 User Patches can be stored.
- Unlike many multi-effects units, the GT-5 incorporates a variety of functions that make it really easy to use. For instance, dedicated buttons let you access effects instantly. A large LCD and rotary encoder are also provided, and a Quick Setting function gives you ready-to-go settings per each effect.
- Tuner function is built-in.

List of Effects

FEEDBACKER
SLOW GEAR
COMPRESSOR
LIMITER
WAH
AUTO WAH
LOOP
OVERDRIVE/DISTORTION
PREAMP
SPEAKER SIMULATOR
EQUALIZER
HARMONIST
FLANGER
SUB EQUALIZER

PHASER
SHORT DELAY
HUMANIZER
RING MODULATOR
VIBRATO
ACOUSTIC GUITAR SIMULATOR
GUITAR SYNTH

DELAY
CHORUS
TREMOLLO
PAN
REVERB
NOISE SUPPRESSOR
FOOT VOLUME

List of Preamp Types

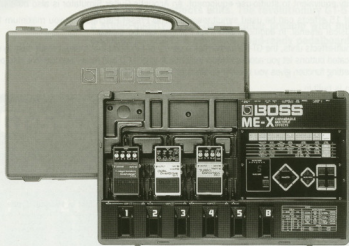
JC-120
CLEAN TWIN
CRUNCH
MATCH DRIVE
VOXY DRIVE
BLUES
BG LEAD
MS1969
SLDN LEAD
METAL5150
METAL DRIVE
CUSTOM PRE1
CUSTOM PRE2



ME-X

Expandable Multiple Effects

The ME-X gives you multiple built-in effects while making it easy to use your favorite compact pedals. In addition to the ME-X's seven categories of effects, which include ten types of spatial effects and a noise suppresser, you can connect three of your favorite compact pedals and control them all from the ME-X.



- Tempo delay for synching delay time with the song tempo. Short delay is also built-in.
- Chorus includes hi-band chorus and analog simulation chorus.
- Other built-in effects include reverb, flanger, pitch-shifter, and 3-band EQ.
- Any six onboard effects can be used simultaneously.
- Up to 25 Patches can be stored in memory.
- Chromatic tuner is built-in.

*Compact pedals not included.



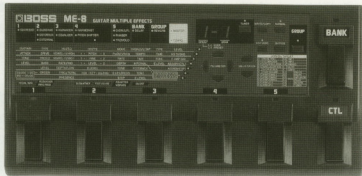
ME-8

Guitar Multiple Effects

The ME-8 is a pedalboard-style multi-effect unit featuring 23 built-in effects. High-quality distortion is produced by the highly acclaimed analog circuitry used on BOSS compact pedals. This gives you a range of classic BOSS distortion sounds ranging from the OD-1 to the OD-2R, the MT-2 and the Blues Driver. A full lineup of unique effects is also included, such as an intelligent pitch shifter that provides three-part harmony, a humanizer that simulates the human voice, a feedbacker, a slow attack, and a ring modulator. The ME-8 is ideal for a broad range of applications from live performance to studio sessions.

List of Effects

COMPRESSOR
OVERDRIVE
DISTORTION
HUMANIZER
3-BAND EQ
2-VOICE HARMONIST
2-VOICE PITCH SHIFTER
NOISE SUPPRESSOR
CHORUS
FLANGER
PHASER
TREMLO
DELAY(NORMAL/TAP)
REVERB
GUITAR AMP SIMULATOR
PEDAL WAH
INTELLIGENT RING MODULATOR
RING MODULATOR
FEEDBACKER
ELECTRONIC ARM
VIBRATO
SLOW ATTACK
SILENT



- The sophisticated digital delay features a tap tempo delay for realtime tempo adjustment.
- A maximum of 11 effects can be used simultaneously.
- A total of 100 sounds composed of 50 Preset Patches and 50 User Patches are built-in.
- The built-in guitar amp simulator is convenient for recording or practicing at home.
- Chromatic tuner is built-in.



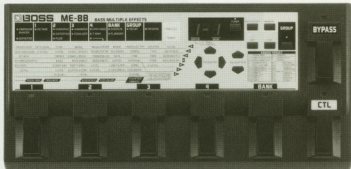
ME-8B

Bass Multiple Effects

The ME-8B Bass Multiple Effects offers a huge collection of bass-optimized effects for today's bassist. Beginning with a high-quality compressor — a must for great bass sounds — the ME-8B also offers high-quality EQ and chorus effects. A variety of unique and innovative effects are also provided, including a “defretter” that transforms fretted bass sounds into fretless bass sounds, a humanizer, and aggressive distortion effects. The CTL (control) pedal has another six effects that are controlled separately for dramatic effect manipulation. In all, a total of 23 effects are provided.

List of Effects

COMPRESSOR
 ENHANCER
 DEFRETTER
 OCTAVE
 OVERDRIVE
 DISTORTION
 FUZZ
 BASS AMP SIMULATOR
 HUMANIZER
 EQUALIZER
 NOISE SUPPRESSOR
 SYNTH BASS
 T WAH
 CHORUS
 FLANGER
 DELAY
 REVERB
 PEDAL WAH
 RING MODULATOR
 INTELLIGENT RING MODULATOR
 SLOW ATTACK
 VIBRATO
 PEDAL PITCHSHIFTER



- Delay time and other modulation-type effects can be controlled by tempo or synched.
- A maximum of 13 effects can be used simultaneously.
- In addition to 32 preset Patches with powerful effect combinations, up to 32 User Patches can be created to store your own effect chains.
- A Bypass pedal allows the effect to be switched on or off by foot. Along with the CTL pedal, the Bypass pedal makes realtime operation easy.
- Built-in chromatic tuner allows quick, accurate tuning.



ACCESSORIES

POWER SUPPLY/CARRYING BOX

PSM-5

Power Supply & Master Switch

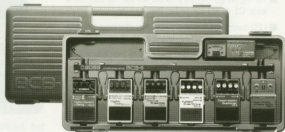
The PSM-5 supplies power for up to seven 9V effect pedals. Simply pressing the pedal lets you switch between the effect-on and effect-off modes of two or more effect pedals. The indicator lights in red for the effect-on mode, and green for the effect-off mode. An AC adaptor and a parallel DC cord for seven units are included.



BCB-6

Carrying Box

Constructed of heavy-duty molded resin, this lightweight yet rugged carrying box stores up to six compact effect pedals for easy portability. You can keep all the pedals connected while in the box, so all you have to do when you get to the gig is open the lid and plug in your guitar.



TUNERS

TU-12/12H

Chromatic Tuners

The TU series is the world's tuner standard, used by top musicians around the globe. The TU-12/12H automatically detects the note being played, displays it, and shows its tuning status. The TU-12/12H's quick, accurate and easy tuning is indispensable for any application including onstage use, rehearsing or studio work. The TU-12H is available in black (TU-12HB).

- Tuning range from C1 to B5 for the TU-12. Extra-wide C1 to B6 range for the TU-12H/12H.
- LED tuning indicators allow at-a-glance confirmation of correct tuning, even on dark stages.
- Concert pitches are adjustable in 1Hz increments.
- A built-in condenser microphone enables tuning of acoustic guitars.



TU-12



TU-12H



TU-12HB



TUNERS

TU-8

Guitar & Bass Auto Tuner

The TU-8 is a dedicated guitar and bass version of the renowned TU-series tuners. In auto mode, the note you're tuning is automatically displayed for quick tuning of guitar or bass. A variety of precision-tuning functions are inherited from the renowned TU-12, including a quick-response tuning meter and an LED indicator that's easy to see on dimly-lit stages.



TU-6

Guitar Tuner

The TU-6 is compact and affordably priced, but loaded with high-performance functions of the TU-12. The mode selector allows a guitar or bass guitar to be tuned. The high-sensitivity mic lets you tune acoustic instruments.



- In addition to the Auto and Manual modes, separate Guitar and Bass modes are available.
- A wide tuning range covers everything from guitar to six-string basses.
- Accommodates special tunings including flat and double flat tunings, as well as open D, E, G, A tuning for guitars.
- A built-in condenser microphone enables tuning of acoustic guitars.

TUNERS

CT-6

Guitar/Bass Auto Tuner

The CT-6 is an Auto Tuner for guitar and bass that offers versatile functions at an affordable price. The super-accurate BOSS TU series needle-pointer technology is utilized for exact tuning and ultrafast response.

- LED meter provides a clear readout in any environment.
- The "0" mark indicates perfect tuning, while LED indicators adjacent to "0" indicate in fine frequency increments whether you're sharp or flat.
- Built-in microphone for tuning acoustic instruments.
- Wide tuning range accommodates all the way down to a five-string bass's low B.
- Flat tuning switch lets you do flat tuning for hard rock and heavy metal.
- Easily readable standard pitch (438Hz-445Hz).



METRONOMES

Dr. Beat

DB-66

Dr. Beat

The DB-66 is the basic version of the Dr. Beat Series. Besides the highly precise metronome function, a tap function lets you determine the tempo by simply tapping your fingers on the TAP button. A variety of time signatures with up to six beats per measure can be programmed using the four sliders.



One of the best methods for rhythm training is listening to the correct tempo and practicing to it. Dr. Beat Series metronomes are the standard for electronic metronomes from BOSS. The beat is indicated through the built-in speaker as well as the LED — a great eyes-and-ears training method for tempo awareness.

DB-88

Dr. Beat

The DB-88 offers comprehensive metronome features for professional musicians. Two independent Beat controls allow complex time signatures to be combined. Up to eight beats per measure can be counted individually. Two types of clicking sounds, as well as a human voice count, are built-in. Tempo, beat, tone, and rhythm level settings can be stored. The Loop function allows the beats to be repeated within a predetermined range or rearranged. A Tap Tempo function and other features are provided. The headphone jack allows the unit to be used quietly at any hour of the day or night.



FOOT CONTROLLERS

FV-300L

Foot Volume/Expression



FV-300H

Guitar/Bass Foot Volume



The FV-300L and FV-300H are sturdy, stage-ready pedals that maintain the high performance of the FV-Series. The high-impedance FV-300H is optimized for electric guitar and bass and is designed to connect before effects units. The low-impedance FV-300L is perfect for keyboards or for connecting after-effects units.

- Heavy-duty design.
- Special 2-in/2-out design enables direct control of stereo keyboards and stereo effects units.
- Minimum Volume knob lets you set the minimum volume at any level you desire.
- Convenient Tuner Out jack enables speedy tuning on stage.
- Combined with the optional PCS-33 Stereo Phone Cable, the FV-300L can also be used as an expression pedal.

FV-50L

Volume Pedal



FV-50H

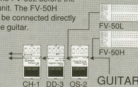
Volume Pedal



The FV-50L/50H are volume pedals that can be used for a variety of purposes from distortion control of effects units to a violin volume control. The high-impedance FV-50H is designed to be connected before guitar effect units in the signal chain. High-frequency roll-off is minimized, and the best possible guitar sound is obtained. Use the low-impedance FV-50L when you want your volume pedal to be connected after effect units or used for keyboards.

- Special 2-in/2-out design enables direct control of stereo keyboards and stereo effects units.
- Minimum Volume knob lets you set minimum volume at any level you desire.
- Convenient Tuner Out jack enables speedy tuning on stage.

Place the FV-50L before the delay unit. The FV-50H should be connected directly after the guitar.



FOOT CONTROLLERS

FS-5U

Foot Switch



FS-5L

Foot Switch



There are two types of BOSS Foot Switches to choose from depending on the application. The FS-5U (momentary type) engages a function while you hold down the switch. The FS-5L (latch type) changes the on/off status each time you press the switch.

AC ADAPTORS

AC Adaptor Compatibility Chart

▲ACA-Series ●PSA-Series ○PSA-Series with PSM-5/LS-2/NS-2

SD-1	▲○	DS-1	▲○	FZ-3	●○	BF-2	▲○	AC-2	●○	LS-2	●	TU-12	●○
SD-2	●○	DS-2	●○	DD-5	●○	PH-2	▲○	CS-3	▲○	ODB-3	●○	TU-8	●○
OD-2R	●○	HM-3	●○	DD-3	●○	TR-2	●○	HR-2	●○	CEB-3	●○	CT-6	●○
BD-2	●○	MT-2	●○	RV-3	●○	GE-7	▲○	PS-3	●○	GEB-7	●○	DB-66	●○
PW-2	●○	XT-2	●○	CE-5	●○	FW-3	●○	OC-2	▲○	LMB-3	●○	DB-88	●○
OS-2	●○	FZ-2	●○	CH-1	●○	AW-2	●○	NS-2	●	SYB-3	●○		

ACA
Series

PSA
Series



Tips Solution for compact effect pedals power supply problems

Use BOSS accessories to obtain optimal performance from multiple compact pedals

To power two compact pedals:



Use a PSA Series adaptor and a parallel DC cord (Roland PCS-29).

To power three or more compact pedals (I):



or



+



+

PCS-20A

Use the LS-2 or NS-2, PSA Series adaptor and a parallel DC cord (Roland PCS-20A) to supply power for a maximum of seven compact pedals.

To power three or more compact pedals (II):



Use a PSM-5 to supply power to up to seven compact pedals.

Note: PSM-5 includes a PSA Series adaptor and parallel DC cord.